

ABSTRACT OF THE DISCLOSURE

A small chip size and high picture quality, and also a quick
CPU access operation to memory are achieved for a semiconductor
5 device for driving liquid crystals. The semiconductor device
includes a single-port memory that stores display-data to be
displayed on a liquid crystal displaying section, a liquid crystal
driver that retrieves the display-data stored in the single-
port memory on a specific cycle and sends the display-data to
10 the liquid crystal displaying section and a controller that
controls the liquid crystal driver so that, when a CPU does not
have access to the single-port memory, the display-data is
retrieved from the single-port memory to the liquid crystal driver
on the specific cycle and the retrieved data is sent to the liquid
15 crystal displaying section, whereas, when the CPU has access to
the single-port memory while the data is being retrieved from
the single-port memory to the liquid crystal driver, a priority
is given to the CPU so that the CPU starts an access operation
while the liquid crystal driver stops a display-data retrieval
20 operation, and on completion of the access operation, the liquid
crystal driver starts again the display-data retrieval
operation.